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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,025	03/08/2001	Christopher Keith	IVEN125465	6553
52531 7590 05/01/2007 CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			EXAMINER MILEF, ELDA G	
			ART UNIT 3692	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/802,025

Applicant(s)

KEITH, CHRISTOPHER

Examiner

Elda Milef

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-128 is/are pending in the application.
- 4a) Of the above claim(s) 93-97 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-92 and 98-128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/13/2006; 12/21/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3692

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 112-116, 122-126 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re claims 112 and 122: The specification, as originally filed does not provide support for the invention as is now claimed, i.e., multiple orders of a user to interact with at least one market process. The sections of the specification referred to by the applicant on p. 33 of the Remarks do not disclose the invention as claimed. For example, the applicant cites pp. 3-4 of the specification wherein the applicant discloses an order ELF may be couple to as many order umpires as

Art Unit: 3692

desired, in other words, as per definitions given by the applicant for order ELF and order umpire, "the virtual floor broker may be coupled to many formal or informal markets as desired." This section does not support the claim of multiple orders of a user. The applicant cites p.7 line 1 to p. 10 line 15 of the specification as further support. The Examiner found support for agents representing orders from customers, but no support for multiple orders of a user.

Clarification is required.

Claims 113-116 and 123-126 are rejected because of their dependency to the rejected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

Art Unit: 3692

establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-18, 20-41, 43-65, 67-81, 86, 89-92, 104-108, 111-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman (U.S. Patent No. 6,601,044).

Re claim 1: Wallman discloses:

configuring a trading process in accordance with the order, wherein the order identifies an item for trading-see col. 12 lines 29-32; col. 13 lines 19-37;

automatically performing, at the trading process, market discovery according to a discovery strategy selected from a plurality of discovery strategies by a user, wherein the discovery strategies are configured to obtain market information for the item in the order according to different discovery methodologies ("the computer-based system of the present invention also allows the investor to be presented with suggested portfolios created through other means-such as a recommended portfolio that reflects a specified strategy [selected strategy], such as the ten under performing stocks

Art Unit: 3692

from the Dow Jones Industrial Index, or from a selected analyst, or from a magazine or other publication, or from a selected organization or through collaborative techniques [plurality of discovery strategies]. As shown in FIG. 4B, the investor can select from a category of portfolios 71-76, under each of which the investor can then select a particular type of portfolio within the category..."-see col. 30 lines 32-67. Although Wallman does not explicitly state that a market discovery is performed, it is obvious that if an investor would like information on the trading price or a suggested portfolio based on specified strategy as taught by Wallman, that some type of market discovery or research into the price of the security must be performed. Further, Wallman teaches ("This database is constantly updated with pricing, capitalization, price to earnings ratio, etc. from various stock reporting services known in the art.")-see col. 26 lines; see col. 10 lines 41-46; In addition, Wallman discloses the following in cols. 13-18: various forms of market, price discoveries including trading pricing information, recommendation or suggestion of securities; Dow Jones Industrial Index data; affinity group investment data and methods of investing; wide variety of data about investments using various multivariate analysis; investing based on the size or type of company;

Art Unit: 3692

Furthermore, Wallman discloses:

automatically acting upon the order at the trading process according to an action strategy selected from a plurality of action strategies by the user ("computer-based system...allows the investor to direct that the portfolio or specified individual securities in the portfolio be purchased or sold or modified as a portfolio transaction.") [user choice of a plurality of action strategies]-see col. 11 lines 31-38 and ("The computer-based system of the present invention, therefore, provides ... automatic and expert management for an investor who wishes to be completely "taken care of".) -col. 44 lines 57-63;

wherein the at least one market process and the trading process are software programs operative on the same trading platform. ("FIG. 6 depicts an exemplary block diagram of the computer-based system of the present invention. It depicts an investor's computer 11a connected to a communication network 12, such as the Internet, which is then connected to a web server 14 that stores the main program for controlling trading and investor access...")-see col. 28 line 11- col. 36;

wherein the item for trading is identified in the order prior to automatically performing said market discovery-see col. 13 lines 19-38;

Art Unit: 3692

wherein said automatically acting upon the order at the trading process is undertaken after automatically performing said market discovery.-see col. 11 lines 30-34; col. 37 lines 40-47).

Re claims 2-4,8, 45: Wallman discloses wherein the trading process is operative on a platform supporting a plurality of trading processes able to interact with the at least one market process; the platform supports at least two market processes having respective market methodologies selected from the set of market methodologies ("the computer -based system of the present invention also allows the investor to be presented with suggested portfolios created through other means-such as a recommended portfolio that reflects a specified strategy, such as the ten under performing stocks from the Dow Jones Industrial Index, or a selected analyst...")-see col. 30, lines 34-41 and col.40, lines 51-58.;

discovery strategy and setting parameters (" Screen 4 (25) also elicits information from the investor that is employed in creating a risk-return preference function for the investor. Such information includes volatility levels, risk, required rate of returns (based on the above asset allocation model), etc. The utilization of various parameters to establish that function

Art Unit: 3692

is then employed to set initial defaults, which can be modified if desired by the investor in Screen 5(26)")-see col. 29, lines 50-57.

Automatically acting includes bidding or offering at the market process based on market discovery results.-see cols.11-13.

Re claim 5,7: Wallman discloses wherein the discovery strategy is selected from at least two of (i)external discovery, (ii) obtain posted prices, (iii) query the market process, and (iv)query an information provider and wherein discover strategy includes discovery from at least one informal market ("individual stocks (e.g., Intel) can be analyzed over various periods of time...information can be provided to the investor...such an investor might have specific desires for stocks which might be expressed in terms of a desire to invest in "big companies" or "high tech" stocks...")-see cols. 17, line 9 - cols. 18, lines 1-44.

Re claims 9,15,27-28,47-48,56,62: Wallman discloses market discovery depends on the characteristics of the order and market process ("Therefore, as a result of the investor's desire to invest in "big companies" a series of stocks would be selected ...which fits into the characteristics desired by the investor")-see cols. 17-18, col. 18, lines 13-16 in particular.

Art Unit: 3692

Re claim 6: Wallman discloses posted prices are stored in a file accessible to all trading processes authorized by the market processes. ("a web server that stores the main program for controlling trading and investor access...")-see Overall System, col. 28, lines 11-27.

Re claims 10,11,13,14,57,58,60,61,80: Wallman discloses:
the order is a short term option request and option exercise and the order has a negotiable price-see col. 40, lines 51-57;

the order is part of a linked order -see col. 21, lines 21-28.

Re claims 12,21, 22, 59: Wallman discloses:
wherein the order is a trial order ("according to yet another aspect of the current invention, the investor could simply click on a button ton the graphical investor interface and receive a proposed portfolio")-see col. 16, lines 2-20
automatically sending a trial order to a market automatically receiving a report indicating that the trial order would have been paired if it had been a regular order("Therefore, as a result of the investor's desire to invest in "big companies" a series of stocks would be selected and displayed to the investor which fits into the characteristics desired...")-see col. 18,

Art Unit: 3692

lines 13-16 and ("suggested portfolios are created by the computer-based system") -see col. 30, lines 32-46 and wherein the report also indicates the price at which the trial order would have been paired if it had been a regular order ("The processor then transmits the actual trading pricing information regarding each asset/liability traded by a particular investor to the particular investor.")-see col. 13, lines 20-38; also see cols. 26-27.

Re claims 16-18,63-65: Wallman discloses:

The market process operates according to an auction methodology (see col. 8, lines 50-51); a match methodology (see col. 22, para. 5); a negotiation methodology (-see col.26, lines 46-67 - col. 27, lines 1-28); an order book with crowd price improvement methodology (Col. 11, lines 53-58).

Re claim 20: Wallman discloses wherein market discovery discovers order depth information at a price other than the best price.-see col. 11, lines 53-64, col. 26, lines 1-9.

Re claims 23-24: Wallman discloses:

the trading process has satisfied a condition at the market process, and further comprising automatically receiving a new contra-side best market price in advance of other market participants while the condition at the market

Art Unit: 3692

process is satisfied and wherein the condition is providing the best market price for a side of the market-see col. 26, lines 1-9.

Re claims 25: -see Figs. 11-13, 16 (157,168-170)

Re claims 26,29,30-35,46,49,50,55: Wallman discloses:

wherein the discovery and action strategy is represented in a decision table having rules, each rule having at least one condition and at least one action to be taken when the condition is satisfied.-see Fig. 15(157), cols. 23-27, 38-40, and in particular ("In the asset allocation model 1: the investor is first queried...the investor's risk tolerance and financial goals... The asset allocation model determines a percentage allocation in each of the general investment types according to a set of known tables.")-see col. 23, lines 20-40.

wherein the decision table includes a holding tank for storing at least one order waiting for a market related event and wherein at least one of the rules also specifies a time for acting on its at least one action.-see col. 22, para.4, col. 26 lines 65-67 -col. 27, lines 1-27, col. 39, lines 24-32 and cols. 39-40.

wherein the automatically performing market discovery includes applying the decision table to process the order when the order is received; when the price discovery is completed;

Art Unit: 3692

when a bid or offer relating to the order is received; when notice of a price improvement opportunity is received.-see cols. 39-40.

wherein the decision table includes, in at least one of a condition and an action of at least one of the rules, a nested decision table.- see cols. 39-40.

Re claim 36,53: the at least one action is to request information from an order room-see cols. 39-40 in particular col. 39, lines 55-60.

Re claims 37 and 38 -see col. 22, para. 5.

Re claim 39-see cols. 22-28 and ("set of known tables")- col. 23 lines 35-41.

Re claims 40-41: the trading proposal specifies a choice of negotiation methodology; trading methodology is selected from personal negotiation, direct negotiation via a computer system, and brokered negotiation. -see col.26, lines 46-67 - col. 27, lines 1-28.

Re claims 43 and 44: Wallman discloses:

Providing a price inquiry to the market process, and requesting that the market process notify its crowd of a price improvement opportunity; trading at a price provided by the crowd. -see col. 11, lines 46-65

Re claims 51,52,54: Wallman discloses:

Art Unit: 3692

wherein the automatically acting includes applying the decision table to determine an action to take when notice is received of a price improvement opportunity.-see col. 11, line 53-col. 17, line 33.

wherein the automatically acting includes applying the decision table to determine an action to take when execution of the order is reported -see col. 26, line 65-col. 28, line 9.

wherein the at least one action is to transfer to another rule (original).-see cols. 26-28.

Re claims 67,68: Wallman discloses:

wherein the action strategy depends on a relationship between the trading process and the market process.

wherein the automatically acting includes routing the order to at least one of a plurality of markets.-see Abstract.

Re claim 69: Wallman discloses:

wherein the plurality of action strategies include at least two of (i) request information from an order room, (ii) retain the order, (iii) post the order at the market process, and (iv) join a crowd at the market process.-see col. 15, line 11- col. 18, line 16.

Re claim 70: Wallman discloses:

wherein posting the order includes providing

Art Unit: 3692

discretion level information indicating data about the order that can be provided to other trading processes using the market process.-see col. 28, lines 11-37.

Re claim 71: Wallman discloses:

wherein posting the order includes providing an order tail indicating the markets at which the order is posted.-see col. 33, lines 44-54.

Re claims 72-75: Wallman discloses:

wherein the market process:
assumes that the posted order is immediately executable;
requests affirmation of availability before executing the order;
wherein the action strategy depends on whether the market process provides a selected order handling feature.

wherein the selected order handling feature is chosen from discretion level matching, providing a first look, and contra-party preference updating.

-see col. 43 lines 44-48 and col. 11, col. 22, para. 5, col. 26, line 65- col. 28, lines 9.

Re claims 76 -79: Wallman discloses:

wherein automatically acting includes determining that a linked order should be executed, the linked order including individual orders respectively associated with prices and quantities, and automatically sending the linked order to

Art Unit: 3692

an execution process for execution such that the individual orders are executed only if all of the individual orders can be executed at the associated prices.--see col. 11, lines 46-64, and col. 15, lines 11-45.

wherein the automatically determining is based on the market discovery.--see cols. 13, 17, 26, 40 (lines 39-50)

wherein the automatically determining includes evaluating an objective function incorporating market information for the individual orders in the linked order.--see cols. 15-17.

wherein the objective function includes at least one condition for each individual order, and wherein the automatically determining includes evaluating how many of the conditions are satisfied, and comparing the number of satisfied conditions with a threshold to decide if sufficient conditions are satisfied so that the linked order should be executed.

("According to another aspect of the present invention...aggregating the transactions of a single investor with the transactions of other investors over an applicable characteristic of the assets or liabilities...")--see col. 15, lines 11-25.

Art Unit: 3692

Re claim 81: Wallman discloses that the execution process is part of a platform process-see col. 26, lines 65-67- col. 27, lines 1-26.

Re claims 86, 89-92: Wallman discloses:

posting the order to the at least one market process and automatically affirming availability of shares of the order to the at least one market-see col. 43, line 58- col. 44, lines 1-25.

further comprising checking availability of the shares before automatically affirming;

wherein the checking availability is based on a number of unpaired shares of the order and a number of in process shares of the order;

further comprising marking shares as in process after affirming their availability;

Art Unit: 3692

wherein the shares are marked as in process for the market to which the shares were affirmed, and further comprising summing the in process shares at all of the markets at which the order is represented to obtain an in process number of shares.

-see col. 15, lines 25-45; col. 22, pars. 4 and 5; col. 26, line 65-col. 27, lines 1-28; col. 33, lines 44-54.

Re claims 104-105: Wallman discloses:

wherein automatically acting includes posting the order to the at least one market process, receiving a trading proposal for the posted order from a contra-side trading process.-see cols. 11-12, 15, 22. automatically determining how to respond to the trading proposal in accordance with a decision table having rules, each rule having at least one condition and at least one action to be taken when the condition is satisfied.-see Fig. 15 (157); cols. 23-27, 38-40.

Re claims 106-108:

wherein automatically acting includes registering in a crowd of the at least one market process, automatically receiving notice of an opportunity to improve upon a book price, automatically determining whether to improve upon the book price, and automatically providing a crowd price that

Art Unit: 3692

improves the book price when the determination is positive.-see col. 11, lines 25-65; col.43, line 58 - col. 44, lines 1-28.

wherein the automatically determining is in accordance with a decision table. -see Fig. 15 (157)

wherein the automatically determining includes requesting an instruction from a user.-see col. 44, lines 58-63

Re claim 111: Wallman discloses:

Further comprising reporting results of automatically acting to a user. -see col. 33, lines 33-54.

Re claims 112: Wallman discloses:

multiple orders of a user comprising configuring multiple trading processes, wherein each trading process is configured in accordance with an order in the user's multiple orders, and wherein each order identifies at least one item for trading -see portfolio asset allocation;-col. 11 lines 25-65; col. 12 lines 29-42; cols. 25; multiple and intra-day investment decisions of the investor-col. 20 lines 59-60;

The remaining claim limitations are similar to those in claim 1 and are therefore rejected using the same art and rationale.

Re claim 113 and 114: Wallman discloses:

Art Unit: 3692

wherein an action in each of the action strategies is conditionally taken based on market information obtained from automatically performing said market discovery; wherein the discovery strategy and action strategy for each trading process are selected by the user prior to automatically performing said market discovery ("The present invention also permits the collection of securities into pre-packaged portfolios...having a portfolio that reflects some strategy or preference determined by some other means, For example, a currently popular strategy is to invest in the ten of the thirty stocks comprising the Dow Jones Industrial Index...Consequently, currently, investors wishing to follow this strategy generally purchase an interest in a unit investment trust.")-see col. 15 lines 46-58; cols. 15-16; col. 17 line 55 to col. 18 line 16; col. 37 lines 44 to col. 38 line 12; col. 43 lines 49-52; col. 44 lines 61-63.

Claim 115 has similar limitations found in claims 7, 12, and 21 above, and therefore are rejected by the same art and rationale.

Re claim 116: Wallman discloses at least one market process and the multiple trading processes are software

Art Unit: 3692

programs that exist independently of each other-see col.

12 lines 29-32; col. 27 line 13 to col. 28 line 37.

Claim 117 and 118 have similar limitations found in claim 1 above, and therefore are rejected by the same art and rationale. Furthermore, Wallman discloses one or more market processes and the one or more trading processes are software programs that are separately executable and are operative on the same trading platform of the computing system-see col. 12 lines 29-32; col. 27 line 13 to col. 28 line 37;

Claims 119, 120, 121 have similar limitations found in claims 114-116 above, and therefore are rejected by the same art and rationale.

Re claims 122-126: Further a computer-accessible medium having executable instructions stored thereon would have been necessary to perform the method of previously rejected claims 112-116 and are therefore rejected using the same art and rationale.

Re claim 127: Further a system would have been necessary to perform the method of previously rejected claim 1 and is therefore rejected using the same art and rationale.

Re claim 128: Further a computer-accessible medium having executable instructions stored thereon would have been necessary

Art Unit: 3692

to perform the method of previously rejected claim 1 and is therefore rejected using the same art and rationale.

3. Claims 19 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman as applied to claims 15 and 62 above further in view of Korhammer (U.S. Patent No. 6,278,982).

Re claims 19, 66: Wallman does not specifically disclose wherein the market process operates according to an order book with crowd price improvement methodology. Korhammer however, teaches ("The customized order book is displayed on the customer's terminal 101 normally organized by security and price. This allows the customer 10 to compare the information from all of the ECNs 50 and 51 of which it is a member; NASDAQ's market makers 21 and 22; and ECN353 best bid an offer in a single display to simplify the decision process. ") -see col. 7 lines 6-13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to include a customized order book containing information about securities from all of the electronic communication networks as taught by Korhammer in order for the investor to perform analytical calculations from this data which

Art Unit: 3692

is displayed and used to aid the investor in making buy/sell decisions.

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman as applied to claim 40 above, in view of Minton (U.S. Patent No. 6,014,643).

Re claim 42: Wallman does not specifically disclose checking the disclosure level of the contra-party trading process before forwarding the trading proposal. Minton however, teaches ("Activation of the negotiate field will make a notation in trading screen 400 that the price specified for this buy order is negotiable. To negotiate an order, a user in the individual trading system can contact another user through e-mail, or video conferencing. During this process, two users attached to the individual securities trading network can negotiate the sale or purchase of a given security. This negotiation process can be done anonymously by using only a user's user identification. If RMST only field is activated, a user's order will only be displayed to other users of the individual securities trading network. If this field is not activated, the individual securities trading network will publicize the user's offer to buy to other networks where

Art Unit: 3692

securities are bought and sold.")-see col. 11 lines 27-41. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to include activating a field on the trading screen indicating whether or not a trade is anonymous prior to trading in order to provide the investor with a choice of publicizing the trade or maintaining confidentiality through anonymous trading.

5. Claims 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman as applied to claim 1 above, in view of Gutterman (U.S. Patent No. 5, 297,031).

Re claims 82 and 85: Wallman discloses wherein the order is a short term option request, and the automatically acting includes requesting the short term option from the market process-see col. 40, lines 51-57.

Wallman does not specifically disclose:

the term of the option being less than one minute;

the term of the short term option is less than one second. Gutterman however, teaches ("A 'local' can 'scalp' over very short periods (liquidating positions within seconds or minutes of entering the transactions.")-see col. 2 lines 11-24, also col. 1. Therefore, it would have been obvious to one

Art Unit: 3692

having ordinary skill in the art at the time the invention was made to modify Wallman to include liquidating positions within seconds or minutes as taught by Gutterman in order for the trade take advantage of price movements occurring at a rapid pace.

Re claims 83, 84: Wallman discloses receiving notice from the market process that the short term option was granted. -see col. 11, lines 46-65 , col. 33, lines 34-54, col. 40, lines 51-57 and forwarding the notice that the short term option was granted to an order room.-see col. 33, lines 34-54.

6. Claims 87, 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman in view of Jain et al. (US Patent No. 6,343,278).

Re claims 87 and 88: Wallman does not disclose automatically canceling the affirmed shares from another of the at least one market processes and further comprising enqueueing an instruction to cancel at least one of the affirmed shares when the other market indicated that the at least one affirmed share was in process at the other market. Jain discloses ("The banknode will automatically cancel all the orders under the order limit...")-see col. 12, lines 6-10 and col. 11, lines 59-67 and col. 12, lines 1-25. It would have been obvious to one having ordinary skill in the art at the time the invention was

Art Unit: 3692

made to modify Wallman to include automatically canceling an order as was done by Jain in order to prevent using an order limit to take unfair advantage of other traders, and to facilitate matching of trades.

7. Claims 98-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman as applied to claim 1 above, and further in view of May (U.S. Patent No. 6,317,727).

Re claim 98: Wallman discloses:

wherein automatically acting includes providing a preference designation of anonymous to the market process, and automatically participating in a trade at the market process with a contra-party trading process that is unaware of the identity of the trading process -see col. 9 lines 60-65. Wallman does not explicitly disclose obtaining a preference rating from the market process for the trading process. May however, teaches ("It is another object of the present invention to provide anonymous bi-lateral credit screening which determines trade eligibility based on both trader's credit preferences...Indication of whether a counterparty can enter into the proposed trade is conveyed to the respective trader, preferably using a color coding scheme in which various colors

Art Unit: 3692

represent the relevant credit status with regard to the viewing trader. The complex check performed by the system may be embodied in a simple yes/no statement..."-see col. 5 line 43-col.7 line 29 and Fig. 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to include obtaining a credit preference rating as taught by May in order to reduce the risk that a trade transaction may be subsequently invalidated by lack of credit.

Re claims 99-103: Wallman does not specifically disclose:

wherein automatically acting includes providing information to a preference updating process, and automatically deciding whether to trade with another market participant based on a preference rating of the other market participant determined by the preference updating process. May however, teaches credit preference updating see col. 26 lines 54-col. 7 line 64 and trading decisions based on rating -see cols. 5-7;

wherein the information comprises a rule for determining the preference rating of the other market participant Credit preferences are the methods or rules selected by a business unit within a credit group for the system 10 to use to screen prices (bids or offers) and trades against all other legal entities.

Art Unit: 3692

wherein the information comprises a rating for the other market participant. May teaches ("Credit preferences are the methods or rules selected by a business unit within a credit group for the system 10 to use to screen prices (bids or offers) and trades against all other legal entities."- col. 23 lines 57-65;

wherein the preference updating process is part of a platform process. May teaches system architecture col. 11 line 59-col. 12 line 16.;

wherein the preference updating process is part of a market process. May teaches ("The market inventory module38...performs a second and final credit preference check...)- see col. 12 lines 3-10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wallman to specifically include credit preference updating, trading based on the updated credit preferences, rules for rating bids and offers based on credit preferences, wherein the credit preference updating is performed by a central processing center, and wherein the credit preference updating is part of the market inventory module as taught by May in order to implement a system which screens bids/offers based on credit preferences so as to reduce the risk that a trade transaction may be subsequently invalidated by lack of credit.

8. Claims 109-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman in view of More (More Companies Buying Back Stock. The Salt Lake Tribune. Salt Lake City, Utah: April 9, 2000. pg. E.3.

Re claims 109, 110: Although Wallman discloses various methods of risk/return analysis in cols. 29-33, Wallman does not specifically disclose:

wherein the order is associated with a liquidity curve, and automatically acting includes posting the order to the at least one market process that determines a premium offered or demanded for the order at a particular price based on the liquidity curve and that pairs the order in accordance with its premium;

wherein the market process determines the premium when the order is posted thereto.

It is well known in the art that supply and demand influence a stock price and are taken into consideration when trading securities as evidenced by More ("The basic economic principle says that as either supply shrinks or demand rises, a price will go up.")-see p. 2, para. 3.

It would have been obvious to one having ordinary skill

Art Unit: 3692

in the art at the time the invention was made to consider supply and demand and its affect on trading securities as shown by More in order to perform risk analysis and calculate premiums or discounts associated with the trading price.

Response to Arguments

9. Regarding claim 1 and the applicant's suggestion that Wallman does not teach "performing...market discovery according to a discovery strategy selected from a plurality of discovery strategies by a user", Wallman teaches that there are numerous strategies that an investor may adopt in making investment decisions. For example, an investor may want to follow the Dow Jones Industrial Index, or may want to invest in portfolios that reflect investments of famous people or analysts, or portfolios encompassing recommendations from investment magazines, newsletters, or other sources.-see col. 25. It is obvious that all of the above mentioned strategies are in fact market discovery strategies as there is some form of analysis of the respective markets involved.

The remaining arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Regarding arguments pertaining to claims 4 and 45 and that Wallman does not teach identifying parameters defining a discovery strategy -see col. 25 and the above response pertaining to claim 1. Regarding the argument that Wallman does not teach setting parameters independently of the parameters set for other trading processes. Wallman discloses various strategies of which the investor can choose (setting parameters)-see col. 25 and the above discussion concerning claim 1.

Regarding claims 9 and 15 and the applicant's argument that Wallman does not explicitly state that market discovery is performed as acknowledged in the Office Action. The Examiner notes that no such acknowledgement was set forth in the office action. Furthermore, Wallman does disclose that market discovery depends on the characteristics of the order and the market process. An investor will invest in a portfolio based on many criteria including amount of money available to invest. There are limitations to all investments as to the market process, i.e. stock market, commodities markets, currencies.. Wallman discloses various strategies, limitations, parameters

Art Unit: 3692

that an investor has at his disposal in using the invention disclosed by Wallman such as an investor selecting characteristics such as investing in "big companies".

Regarding claims 10,11,57,58 and that Wallman's disclosure of "Thus futures, options, bonds and other negotiable securities can equally be the subject of trading with the present invention." in col. 40 lines 51-55 does not teach short term options. The Wallman disclosure teaches that the invention could be used in options trading. Options trading encompasses long-term and short-term trading. In response to the applicant's suggestion that "short term options" were not in the state of the art at the time the present application was filed, the applicant's attention is directed to the prior art made of record and not relied upon as cited in the conclusion of this office action. In particular, the article by Roger Lowenstein discloses various types of options including short term options. The article is dated Nov. 7, 1997 prior to the applicant's invention and the Wallman reference filing date.

Regarding claims 80 and 13,14,60,61,76-79 and the applicant's argument that Wallman does not teach obtaining a short-term option for at least one of the individual orders in the linked order. The applicant defines a linked order as a set of orders executed as a single-order on p. 8 line 6. Wallman

Art Unit: 3692

discloses the processor aggregating all buy or sell orders and all otherwise economically unviable buy and sell orders for each asset/liability in the trading data from each of the investors to obtain a single economically viable buy order and a single economically viable sell order for each asset/liability. (As used herein, economically unviable orders include fractional shares, odd lots, and small amounts of shares that cannot be normally traded, or cannot be normally traded on a cost-effective basis.-see col. 11 lines 53-65. Furthermore, Wallman discloses "The computer-based system of the present invention can be used by ordinary investors to manage other "things" such as options and commodities trading, bonds, foreign equities, or used for investment banking for the trading of, for example, derivatives. The computer-based system of the present invention can be used to establish a system to create and manage a portfolio of any assets or liabilities or combination thereof that can be traded, and provides benefits whenever diversification or utilization of portfolio concepts is an advantage (as would be the case with most financial assets). For example, as described above the invention could be used for any security, including foreign or domestic equities, options, warrants, bonds, notes, limited partnership interests, private placement securities or otherwise. The method of: 1)

Art Unit: 3692

obtaining preferences for portfolio characteristics of investors; 2) employing those preferences to describe and select items to be transacted; 3) analyzing and transacting on such assets as a portfolio as opposed to as separate assets; 4) aggregating such transactions over an applicable characteristic, such as a time period (for example, every three hours) or a time certain (for example, at 9:30 am, 12:30 pm and 4:30 pm) or an amount (for example, having 1,000 transactions, or transactions totaling \$5,000, aggregated) or otherwise; and 5) executing the transactions as aggregated and, if applicable, netted, transactions can be applied to any of these items." -see col. 46 lines 20-49.

Regarding claims 12,21,22,59 and the applicant's suggestion that a proposed portfolio is not the same as a trial order, the proposed portfolio is presented to the investor, the investor analyzes the recommended portfolio if desired, and then the transactions could be executed. The proposed portfolio shows the investor the asset allocation therefore, pricing information is disclosed, and then sent to market for execution if accepted by the investor.

Regarding claim 20, Wallman discloses "each relevant factor of a security is associated with the security. When the investor establishes criteria for his portfolio, each of the

Art Unit: 3692

relevant factors for each security in the database is compared to the criteria..."-see col. 26 lines 1-9. Wallman is disclosing that the criteria for purchasing a investments in the portfolio can be based on various specified criteria for example, investing in a company with no negative corporate governance factors as shown in col. 26 lines 10-15.

Regarding claims 23-24 and the applicant's suggestion that Wallman does not suggest automatically receiving a new contra-side best market price, Wallman discloses automatically including securities in the investor's portfolio that meet investor specified criteria-see col. 26, lines 1-9. Wallman teaches automatically receiving updated pricing information and if the investor criteria is met, processing the transaction. It is obvious that an investor wants the best return on his investment, therefore the best market price would be a relevant factor.

Re claims 26,29,30-36,46,49,50,53,55,105: Regarding the applicant's suggestion that Wallman does not use decision tables. The applicant's attention is directed to col. 39 wherein Wallman teaches "The portfolio characteristic generator 156 can then generate a series of rules to be used to select stocks. This rule based stock selection 157 then accesses information in the securities database 158...". The applicant

Art Unit: 3692

defines decision tables as providing a facility for defining conditions that must occur before action is taken-see p.27 of the specification. It is obvious from the teachings of Wallman that the series of rules disclosed are defining conditions that must be present before a security is bought or sold in order to meet investor specified criteria.

Re claims 37 and 38: Regarding the applicant's suggestion that Wallman does not teach exchanging trade proposals with contra-side orders, the applicant's attention is directed to col. 22 lines 25-34 of Wallman. Wallman teaches trade execution and netting orders against each other. Furthermore, it is obvious and old and well known in the art of securities trading that a "trade proposal" is a buy or sell transaction in which the investor is requesting a certain price for a specific amount of the security. The contra-side order is the opposing sell or buy order that completes a transaction. Furthermore, Wallman discloses automatically performing market discovery-see claim 1.

Re claims 40, 41, 43, 44, 106: Regarding the applicant's suggestions that Wallman does not disclose wherein the trading proposal specifies a choice of negotiation methodology-see cols. 26-27 and brokered versus non-broker, and third party trading systems;

Art Unit: 3692

Regarding the applicant's suggestion that Wallman does not disclose an order book with crowd price improvement methodology. An order book is maintained by a member of an exchange and sees that the appropriate transactions are executed, therefore, Wallman discloses in to col. 11 lines 45-67 storing buy and sell orders in a database [order book] and processing the orders once they become economically viable;

Re claims 51 and 52: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., wherein the at least one action is to transfer to another rule) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Re claims 70 and 71: Regarding the applicant's suggestion that Wallman does not teach wherein posting the order includes providing discretion level information indicating data about the order that can be provided to other trading processes using the market process. The applicant's attention is directed at col. 28 lines 29-32 wherein Wallman teaches ("The web server 14 is also

Art Unit: 3692

electronically connected to other investors and traders 15 for executing trades to be made outside of the computer-based system of the present invention...").

Re claims 72-78: In response to the applicant's arguments, the applicant's attention is directed to the new grounds of rejection in claim 1 above, and the arguments set forth above regarding discretion level matching, contra-side orders.

Re claims 86, 89-92: Wallman teaches affirmation of availability of shares in particular ("According to another aspect of the present invention, the method can include the step of netting the transactions against the transactions of other investors after aggregating the transactions, and then executing any remaining transactions after netting")-col. 15 lines 25-45, col. 22 pars. 4 and 5; and col. 33 lines 44-54 wherein Wallman teaches ("The precise number of shares to be purchased and allocated to the investor are determined at the next transaction window based on the then current prices for the stocks...The portfolio is then updated and stored by the system for access the next time the investor logs onto the system.")

Re claims 19, 66: Korhammer discloses ("The customized order book is displayed on the customer's terminal...this allows the customer 10 to compare information...")-see col. 11, lines 27-41.

Art Unit: 3692

Re claims 82 and 85: Wallman discloses option trading. Gutterman teaches the liquidation of positions in a manner of seconds in col. 2. Gutterman further teaches computer-based techniques for managing orders placed in a physical market for trading instruments such as stocks, bonds, stock options, futures options and futures contracts on commodities...-see col. 1, lines 5-10. Therefore, it is obvious that the liquidation of positions disclosed by Gutterman refers to options trading.

Re claims 87,88: Regarding applicant's suggestion that Jain does not disclose canceling of orders does not constitute canceling of affirmed shares. Jain discloses canceling a order based on the order being under an order limit. The "order" disclosed by Jain was affirmed and not executed prior to the cancellation.

Re claims 98-103: May discloses ("It is another object of the present invention to provide anonymous bi-lateral credit screening which determines trade eligibility based on both trader's credit preferences...Indication of whether a counterparty can enter into the proposed trade is conveyed to the respective trader, preferably using a color coding scheme in which various colors represent the relevant credit status with regard to the viewing trader. The complex check performed by the system may be embodied in a simple yes/no statement...")-see

Art Unit: 3692

col. 5 line 43- col.7 line 29 and Fig. 7. [emphasis added].

Therefore, May teaches based on preference information, deciding whether to trade with another market participant.

Re claims 109-110: Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lowenstein, Roger. "Why Stock Options Can Be Dynamite for a Portfolio", Wall Street Journal. (Europe). Brussels: Nov 7, 1997. pg. 13.-cited for its reference to short term options.

Tsu, Maria E. "Tutorial On Using Options In Active Strategies". Derivative Quarterly. New York: Fall 1999. Vol. 6, Iss.1; pg. 39, 10 pgs.-cited for its reference to basic features of options including very short-term options.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS**

Art Unit: 3692

ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday -Thursday 8:30 am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3692

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elda Milef
Examiner
Art Unit 3692



RICHARD E. CHILCOT, JR.
SUPERVISORY PATENT EXAMINER